Listing of All Claims Including Current Amendments

1-13.   (cancelled).

14.   (currently amended) A method for improving a medical procedure; comprising:

providing an endoscope <u>having a shaft</u> with a longitudinal axis and a ~~variable~~ view vector <u>that pivots relative to the longitudinal axis of the shaft</u>;

positioning the endoscope relative to <u>an</u> anatomical structure to acquire images of the structure;

providing a first display of the images acquired by the endoscope;

providing a second display of a graphical model of the anatomical structure simultaneously with the first display of the images of the anatomical structure acquired by the endoscope, wherein the graphical model is reconstructed from volumetric scan data of the anatomical structure;

acquiring position data of the endoscope relative to the anatomical structure;

displaying in the second display a graphical ~~representation~~ <u>model</u> of the endoscope <u>shaft</u> relative to the anatomical structure based on the position data and the volumetric scan data;

acquiring configuration data of the orientation of the view vector relative to the longitudinal axis of the endoscope <u>shaft as the view vector pivots relative to the shaft</u>;

displaying in the second display a graphical representation of the view vector relative the longitudinal axis of the endoscope <u>shaft as the view vector pivots relative to the shaft</u> based on the configuration data.

15.   (previously presented) The method of claim 14, further comprising displaying on the second display a graphical representation of the endoscopic view cone.

16.   (previously presented) The method of claim 15, further comprising displaying on the second display a marker that indicates the up direction of the images acquired by the endoscope.

17.   (previously presented) The method of claim 14, wherein the first and second displays are displayed on first and second monitors.

18.   (previously presented) The method of claim 14, wherein the step of acquiring position data of the endoscope relative to the anatomical structure comprises using a plurality of cameras to track light emitting diodes on the endoscope.

19.   (previously presented) The method of claim 14, further comprising the steps of:
        selecting a target point relative to the reconstructed anatomical structure; and
        calculating a set of endoscope tip positions from which there is a direct line of sight to the target point.

20.   (cancelled).

21.   (previously presented) The method of claim 19, further comprising the steps of:

selecting an entry path for the endoscope;

calculating which of the endoscope tip positions for which there is a direct line of

sight to the target point are intersected by the entry path; and

displaying the endoscope tip positions that are intersected by the entry path.

22.   (new) A method for improving a medical procedure; comprising:

providing an endoscope having a shaft with a longitudinal axis and a distal end,

and a view vector that pivots relative to the longitudinal axis of the shaft;

positioning the endoscope relative to an anatomical structure to acquire images

of the structure;

providing a first display of the images acquired by the endoscope;

providing a second display of a graphical model of the anatomical structure

simultaneously with the first display of the images of the anatomical structure acquired

by the endoscope, wherein the graphical model is reconstructed from volumetric scan

data of the anatomical structure;

acquiring position data of the endoscope relative to the anatomical structure;

displaying in the second display a graphical model of the endoscope shaft

relative to the anatomical structure based on the position data and the volumetric scan

data;

acquiring configuration data of an internal view changing mechanism in the distal

end of the shaft that pivots the view vector relative to the longitudinal axis of the shaft;

displaying in the second display a graphical representation of the view vector relative the longitudinal axis of the endoscope shaft as the view changing mechanism pivots the view vector relative to the shaft based on the configuration data.

23.   (new) The method of claim 22, further comprising displaying on the second display a graphical representation of the endoscopic view cone.

24.   (new) The method of claim 23, further comprising displaying on the second display a marker that indicates the up direction of the images acquired by the endoscope.

25.   (new) The method of claim 22, wherein the first and second displays are displayed on first and second monitors.

26.   (new) The method of claim 22, wherein the step of acquiring position data of the endoscope relative to the anatomical structure comprises using a plurality of cameras to track light emitting diodes on the endoscope.

27.   (new) The method of claim 22, further comprising the steps of:

selecting a target point relative to the reconstructed anatomical structure; and

calculating a set of endoscope tip positions from which there is a direct line of sight to the target point.

28.   (new) The method of claim 27, further comprising the steps of:

selecting an entry path for the endoscope;

calculating which of the endoscope tip positions for which there is a direct line of

sight to the target point are intersected by the entry path; and

displaying the endoscope tip positions that are intersected by the entry path.